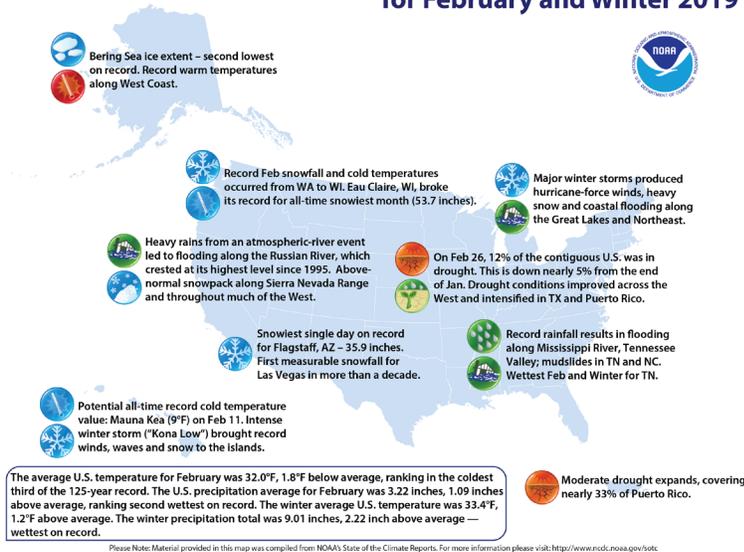




National — Significant Events for February and Winter, 2019

U.S. Selected Significant Climate Anomalies and Events for February and Winter 2019



The average U.S. temperature for February was 32.0°F, 1.8°F below average, ranking in the coldest third of the 125-year record. The U.S. precipitation average for February was 3.22 inches, 1.09 inches above average, ranking second wettest on record. The winter average U.S. temperature was 33.4°F, 1.2°F above average. The winter precipitation total was 9.01 inches, 2.22 inches above average, the wettest on record.

Highlights for the Region

Temperatures exhibited a west-to-east pattern, with slightly cooler-than-normal temperatures in parts of the west and warmer-than-normal temperatures in the east.

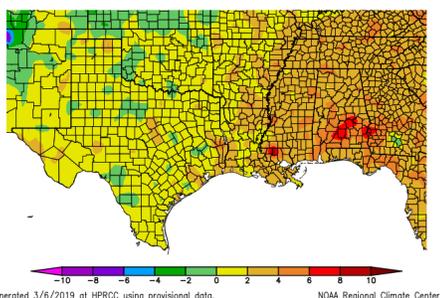
Precipitation also exhibited a west-to-east pattern, with below-normal precipitation in the west and above-normal precipitation in the east.

The main impact this winter was extreme precipitation, with parts of every state receiving precipitation 200% or more of normal.

Regional — Climate Overview for December 2018 to February 2019

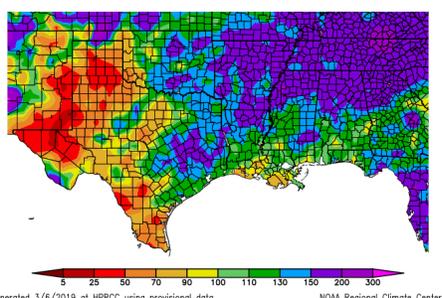
Temperature and Precipitation Anomalies

Departure from Normal (°F)
12/01/2018–2/28/2019



Winter temperatures exhibited a west-to-east pattern across the region in general, with above-normal temperatures in the east and normal to slightly below-normal temperatures in the western states. On the whole, the temperatures ranged between 2°F below normal to 6°F above normal.

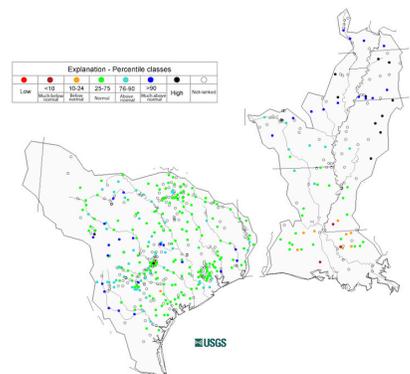
Percent of Normal (%)
12/01/2018–2/28/2019



Winter precipitation exhibited a west-to-east pattern, with drier-than-normal conditions in the west and wetter-than-normal conditions in the east. Parts of Texas received 50% or less of normal precipitation while most of Tennessee and Arkansas as well as parts of Louisiana, Oklahoma, and Texas received 150% or more of normal precipitation.

Streamflows

February average streamflow versus historical streamflow



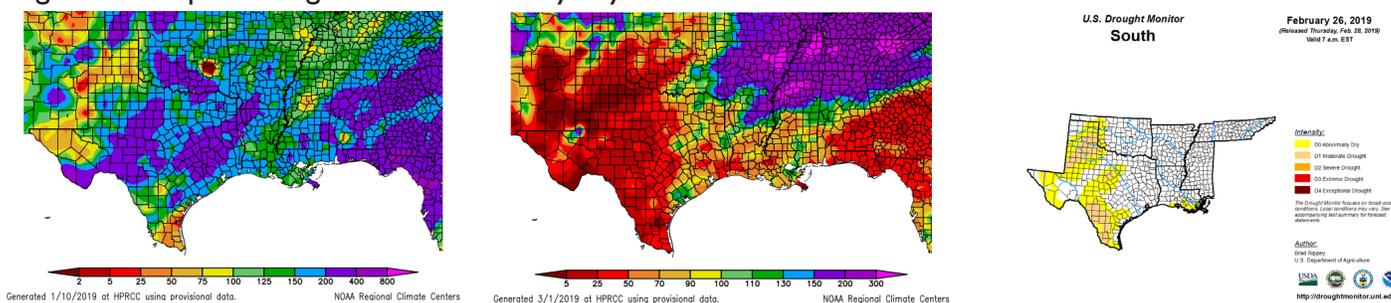
The above figure illustrates February average streamflows in the Texas Gulf and Lower Mississippi Basins as compared to historical streamflows. Streamflows in southern Louisiana and Mississippi are below normal while streamflows in inland Texas, Arkansas, Tennessee, and northern Mississippi are above normal.



Regional Impacts — For December 2018 to February 2019

Extreme Precipitation and Drought

This winter, the Southern Region was exposed to above normal precipitation extremes. Even though precipitation varied across the region, every state experienced precipitation events with totals at least 200% of normal. In December, areas in Texas, Oklahoma, Louisiana, Arkansas, and Mississippi received precipitation 200–400% of normal, with parts of Texas and Oklahoma receiving precipitation 400–800% of normal. In January, parts of Oklahoma and Arkansas received precipitation 200–400% of normal. In February, parts of Arkansas, Mississippi, Louisiana, and most of Tennessee received precipitation 200–300% of normal, with parts of Arkansas, Mississippi, and Tennessee receiving precipitation 300% or more of normal. As a result, Texas experienced its ninth wettest December on record, Tennessee experienced its wettest February and wettest winter on record, Arkansas experienced its eighth wettest December, ninth wettest February, and third wettest winter on record, Mississippi experienced its tenth wettest winter on record, Oklahoma experienced its ninth wettest winter on record, and the region as a whole experienced its seventh wettest December and second wettest winter on record (1895–2019). Despite these extreme precipitation events, drought conditions degraded across the western part of the region. At the end of February, just under a third of the region was experiencing at least abnormally dry conditions.



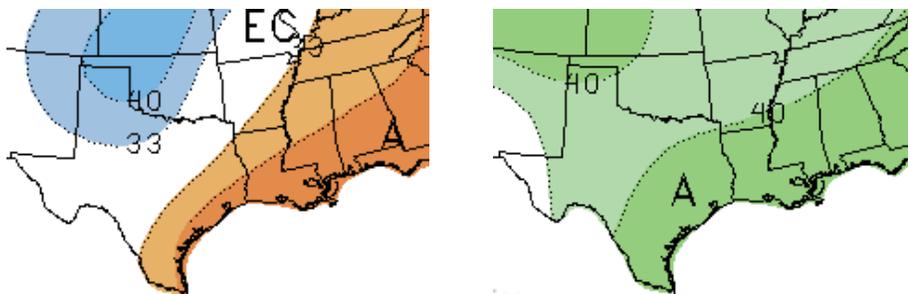
Above: Percent of normal precipitation in December (left), February (middle), and February drought conditions (right).

CPC — Three-Month Outlook

Temperature

Precipitation

Outlook for April to June



A = Above-normal temperatures EC = Equal chances
B = Below-normal rainfall N = Normal

According to the Climate Prediction Center, April through June temperatures are projected to be below normal across most of Oklahoma and northern Texas, with the greatest chances in western Oklahoma and far northern Texas. Temperatures are projected to be above normal across southeastern Texas and Arkansas as well as all of Tennessee, Mississippi, and Louisiana.

Precipitation is projected to be above normal for almost the entire region, with the greatest chances in far western Oklahoma; far northern, eastern, and southern Texas; southern Arkansas; eastern Tennessee; most of Mississippi; and all of Louisiana.

El Niño Outlook

NOAA's Climate Prediction Center is calling for an 80% chance of El Niño continuing through spring, with a 60% chance that El Niño continues through summer. Atmospheric anomalies have become better defined over the winter, increasing the chances of localized impacts.

Gulf Regional Partners

Earth Scan Laboratory at Louisiana State University (esl.lsu.edu)

NOAA/NWS Climate Prediction Center (cpc.noaa.gov)

NOAA/NOS Gulf of Mexico Coastal Services Center (csc.noaa.gov)

NOAA Gulf of Mexico Collaboration Team (regions.noaa.gov)

NOAA/NESDIS National Centers for Environmental Information (ncei.noaa.gov)

NOAA/NWS Southern Region (srh.noaa.gov)

Southern Climate Impacts Planning Program (southernclimate.org)

Southern Regional Climate Center (srcc.lsu.edu)